

# EUROPEAN PATENT OFFICE

Patent Abstracts of

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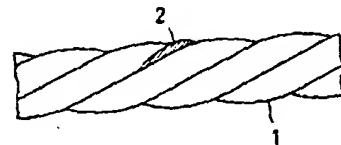
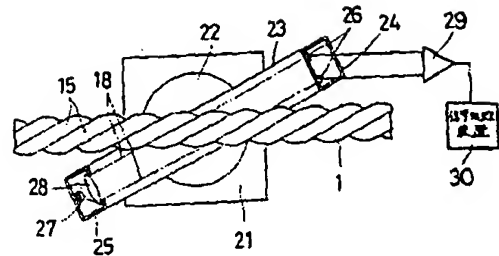
APPLICATION DATE : 13-06-87  
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TITLE : METHOD AND APPARATUS FOR  
DETECTING ABNORMALITY OF  
TWISTED WIRE



**ABSTRACT :** **PURPOSE:** To detect the abnormality of an outer shape due to twist inferiority not appearing as the change in an outer diameter, by making the projecting axis of a flood light projector almost parallel to the twist angle of a twisted wire and receiving a projected image by a pair of photosensors to detect the difference between the quantities of the lights received by both photosensors.

**CONSTITUTION:** The light projecting axis of a flood light projector 25 projecting the outer shape of a twisted wire 1 is made almost parallel to the twist angle of the twisted wire 1. The projected image is received by a pair of photoreceptors 26 and the output signals thereof are transmitted to a signal processing apparatus 30 through a differential amplifier 29. When the twisted wire 1 is normal, the projected images of both photosensors 26 are almost equal and the output thereof are slight and the output of the amplifier is also small. However, when the abnormal part 2 of the twisted wire 1 passes the photosensors, the outputs of both photosensors become unbalance and the output of the differential amplifier also becomes large to detect abnormality. Therefore, the abnormality of the outer shape of the twisted wire 1 due to twist inferiority not appearing as the change in the outer diameter thereof can be detected.

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